



Transportation Synthesis Report

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Landscape Architect Duties in State DOTs

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Transportation Synthesis Reports (TSRs) are brief summaries of currently available information on topics of interest to WisDOT technical staff in highway development, construction and operations. Online and print sources include NCHRP and other TRB programs, AASHTO, the research and practices of other state DOTs, and related academic and industry research.

REQUEST FOR REPORT

State transportation agencies employ staff landscape architects in a variety of roles. WisDOT's Bureau of Highway Operations asked RD&T to identify and describe some of these roles for comparison with our own practices.

SUMMARY

State DOT landscape architects have roles in planning and design, creation of specifications, and on project development teams. The skills of landscape architects prove valuable for aesthetic and context-sensitive concerns, and these architects are also involved in managing projects, even when there are no landscape elements. We review here the practices of three states (Rhode Island, California, and Minnesota), considering the number and distribution of architects, duties performed and policy imperatives. Despite functional similarities, these states show distinct differences in employment practices, from high dependence on outsourcing in Rhode Island, to self-sufficiency in California. We also provide information on landscape architect duties in Maine, Florida and Tennessee.

RHODE ISLAND

Rhode Island's DOT has long held landscape architects on staff. Barbara Petrarca, a 31-year veteran of the department, was cited in 2000 by her state's House of Representatives for her appointment as chair of TRB's Landscape and Environmental Design Committee.

Distribution. RIDOT currently has five landscape architects on staff. Three work in the Landscape Architecture Design Unit, one in Construction, and one in Maintenance.

Duties. Landscape architects work on every RIDOT project, sometimes as project managers. In Design, the staff develops specifications, works on erosion control with the environmental services office, and administers and monitors outsourcing. In the Construction Bureau, the architect works as resident engineer and project manager for all separate landscape projects (those that start on a project site after facility construction). In Maintenance, the architect works to make sure vegetation is protected.

Policy. All RIDOT projects require a landscape architect on the design team in at least a consulting capacity, and 95 percent of that work is outsourced. (This proportion is typical for RIDOT; apparently 95 percent of project engineering is also outsourced.)

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CALIFORNIA

Caltrans retains an enormous number of landscape architects, individuals involved in everything from transportation corridor master plans to designing sound walls.

Distribution. Caltrans has 230 to 240 landscape architects on staff. The main office at Caltrans headquarters staffs 15, and the rest are distributed within 12 districts statewide.

Duties. District architects work on design and project development, handle replacement and mitigation of landscape issues on highway projects, consult on visual impact and environmental assessment, approve grading and erosion control measures in stormwater management procedures and work on various documentation projects for corridor master plans. A few of these architects work as project managers for both landscape and non-landscape projects. Architects in the main office work in two broad teams, each with policy and procedure duties, responsibility for allocation of funds to programs, and review authority over district landscape plans and designs. The Roadside Group focuses on roadside management, erosion control, developing specifications, reviewing district plans and updating manuals. The Highway Operations Group focuses on highway vegetation and planting and rest areas.

Policy. Each project development team is expected to include a landscape architect, except for those of pure traffic safety (like ramp timing lights). Sometimes this requirement is shirked or the architect marginalized, but Caltrans has found architects particularly skilled at assessing visual impact, context sensitivity, and holistic aesthetic matters.

Darold Heikens, Assistant Program Manager, Office of State Landscape Architecture, 916.654.4817, darold.heikens@dot.ca.gov. See the Caltrans Landscape Architecture Home Page, <http://www.dot.ca.gov/hq/LandArch/index.htm>.

MINNESOTA

Two years ago MnDOT's restructuring reduced the number of units with landscape architecture duties from three to two, to increase efficiency.

Distribution. MnDOT currently employs 14 landscape architects, most of whom are distributed into subunits of the Design Services section of the Office of Technical Services. Eight architects work in the Landscape Architecture Unit (LAU) and four in the Site Development Unit (SDU). In addition, one works in the scenic byways program and one in the intermodal transportation program.

Duties. The LAU carries broad duties in corridor planning, design support and project development. In project development, landscape architects carry out work in design, planning, advocacy and technical support. The SDU handles landscape design in rest area development, park-and-rides, and MnDOT buildings. The scenic byways architect works on various programs, including coordinating the Great River Road program. The intermodal transportation architect focuses on bikeways.

Policy. Landscape architects don't have a mandate to work on all MnDOT projects, but most project design teams have a reviewing landscape architect, and it has become exceptional for any project with landscape implications to not include the participation of a landscape architect.

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OTHER STATES

Maine. The Maine DOT landscape architecture unit has four architects administrating the state's scenic byways program, hosting the agency's Americorps volunteer coordinator and working on related programs in tree and shrub planting, park creation, and erosion and sediment control, among other functions. <http://www.maine.gov/mdot/environmental-office-homepage/430/430.php>.

Florida. The state's Highway Beautification Council must include a landscape architect. Now chaired by one such architect, the seven-member FDOT council reviews and recommends grant applications for highway beautification projects. <http://www11.myflorida.com/emo/beauty/council.htm>.

Tennessee. A landscape architect in the maintenance division designs projects and programs, administers field contracts, assists in design and administration of TnDOT's roadside wildflower program, and develops programs such as an integrated vegetation management program. http://www.tdot.state.tn.us/Chief_Engineer/assistant_engineer_operations/mainte~1/Landscape%20Architect.htm.